Assessing the Missions of Digital Humanities Centers

Sarah Sanders

Email: ssande38@jhu.edu

Johns Hopkins University

Museum Studies Digital Curation Certificate Program

Fall 2019

December 15, 2019

Abstract

This paper examines the outlined missions of Digital Humanities Centers, as well as what activities they are partaking in to meet them. Additionally, as producers of unique research data, do Digital Humanities Centers view the preservation of their research data as important to their missions? Formal attempts to define these entities are prevalent, although most alliances and groups dedicated to the field of digital humanities accept the unavoidable differences and conflation that occur. For the purposes of this paper, Digital Humanities Centers will be defined as entities "where new media and technologies are used for humanities-based research, teaching, and intellectual engagement and experimentation" (Zorich, 2008a, p. 4). This broad definition was chosen to allow the investigation of various types of Digital Humanities Centers (such as Labs, Departments within larger units, and virtual spaces) with differing focuses to be appropriately included. In addition to providing background information on the field of digital humanities and related Digital Humanities Centers, their outlined missions and activities; this paper also thoroughly examines three Digital Humanities Centers: Digital Humanities at Michigan State University (DH@MSU), the Roy Rosenzweig Center for History and New Media (RRCHNM) at George Mason University, and the Digital Humanities Initiative (DHi) at Hamilton College.

Keywords: digital humanities centers, digital humanities, mission statements, research data, preservation

Table of Contents

Abstract……2
Introduction……..4
Definition of Digital Humanities Centers……6
Literature Review……7
Research Design……10
Background of the Field of Digital Humanities and related DH Centers.……11
Mission Statements……13
List of Selected DH Centers and Interviewees……..17
Identifying and Selecting DH Centers……...17
Backgrounds of Selected DH Centers……18
Mission Statements……20
Digital Humanities at Michigan State University……..20
Roy Rosenzweig Center for History and New Media……...21
Digital Humanities Initiative……..21
Activities……..…….....22
Digital Humanities at Michigan State University……..22
Roy Rosenzweig Center for History and New Media……...22
Digital Humanities Initiative……..23
Data and Preservation……24
Digital Humanities at Michigan State University……..24
Roy Rosenzweig Center for History and New Media……...25
Digital Humanities Initiative……..25
Conclusion……31
References……..36
Appendix A: List of DH Milestones……..42
Appendix B: DH Organizations……44
Appendix C: Analysis of Mission Statements……...46
Appendix D: Interview Notes……51

Introduction

The number of organizations identifying as Digital Humanities Centers (to be abbreviated as "DH Centers" within the text of this paper) has continued to rise steadily over the past decade. Despite this progression, there is currently no single model for these entities – their functions, projects, or focuses. Considering this, one might wonder what are the outlined missions of current DH Centers? In their own words, what do DH Centers summarize their aim to be? To answer these questions, I take an in-depth look at DH Centers' outlined mission statements. Mission statements help determine an organization's direction, and sum up its desired objectives, strategies, and values. Mission statements also guide the organization by focusing its staff's energy and attention on ideas that will fulfill the organization's goals. Through a unique analysis of 25 mission statements from DH Centers across the U.S. (explained in detail later), a portrait of shared purposes emerges.

Looking at the presence of relevant "buzzwords" within the chosen mission statements, patterns of mutual goals materialize. Words hold great power, and the inclusion of certain ones within DH Centers' public mission statements indicates their priorities. The highest percentages of shared buzzwords include:

Word	**Percentage**
Method(s)	52%
Projects	48%
Research Collaborative/Collaboration(s)/Collaboratory Faculty Innovative	40%

History Technology Support	36%
Tools	32%

These percentages also hint at DH Centers' aligned activities. More than half of the analyzed DH Centers put a focus on diffusing and utilizing digital methods (52%), and almost just as many engage in digital humanities projects (48%). Others concentrate on education (16%), or the development and use of tools (32%). To further understand what these entities are doing to fulfill the purposes they have outlined, I learn from experts at three selected DH Centers what activities and functions they are performing in order to successfully achieve the ambitions presented within their mission statements.

I continue my exploration of the missions of DH Centers by examining what these organizations do to preserve the research data collected by scholars associated with them. In satisfying their missions, DH Centers may become producers of unique research data through their various projects and developments. *Our Cultural Commonwealth: The Report on the ACLS Commission on Cyberinfrastructure for the Humanities and Social Sciences* states that, "A key component of the knowledge society is education, and education requires preservation of the record of the past as well as ongoing scholarship and research" (ACLS & Unsworth, 2006, p.22). DH Centers already recognize and support the preservation of the past, but less often identify the necessity of preserving their present work for the future. Only 8% of the analyzed DH Centers' mission statements mention the act of "preserving" at all, and only 12% of statements consider the "future" of their work. Even more alarming, the term "data" is absent from all of the 25 statements but one. Because of this, the next question is whether DH Centers see the preservation

of their data as important to their missions (or not)? If DH Centers do, in fact, acknowledge that the preservation of research data is a pivotal aspect of their vocations, why is this notion not present in their outlined mission statements? Briefly looking at the possible challenges of the ability of DH Centers to preserve their research data, this paper questions whether the mission statements of DH Centers need to be re-visited to reflect the important task of research data preservation.

Assessing the missions of DH Centers is incredibly important because without clear objectives, directions, and plans, these organizations are less likely to grow and thrive long-term. Similar to museums, DH Centers' activities should support, directly or indirectly, their missions and identified audiences. If DH Centers are meant to serve the field of humanities scholars, how are their projects and activities aligned to do so? It is also imperative to examine what DH Centers are doing to preserve their research data, in order to determine whether it can be used by future researchers. This research also provides background and historical information regarding the evolution of the field of digital humanities and DH Centers, what factors may affect their outlined goals, and recommendations for the future progression of these organizations.

Formal attempts to define these entities are prevalent, although most alliances and groups dedicated to the field of digital humanities accept the unavoidable differences and conflation that occur. For the purposes of this paper, Digital Humanities Centers will be defined as entities "where new media and technologies are used for humanities-based research, teaching, and intellectual engagement and experimentation" (Zorich, 2008a, p. 4). This broad definition was chosen to allow the investigation of various types of Digital Humanities Centers (such as Labs, Departments within larger units, and virtual spaces) with differing focuses to be appropriately included. This paper thoroughly examines three Digital Humanities Centers: Digital Humanities

at Michigan State University (DH@MSU), the Roy Rosenzweig Center for History and New Media (RRCHNM) at George Mason University, and the Digital Humanities Initiative (DHi) at Hamilton College. All three of these DH Centers have successfully created world-class projects, provided training in scholarly methods, and fostered collaborative communities. With deep roots in digital humanities undertakings, the highlighted organizations provide great opportunities for efficacious research.

Literature Review

As the number of DH Centers continues to rise steadily, so does scholarship pertaining to the topic. Without one single model for DH Centers, "Some focus on pedagogy. Others on research. Some build things. Others host things. Some do it all" (Fraistat, 2012). This is also true of literature on the topic; scholars concentrate on any number of sub-categories within the ongoing development process of DH Centers. Even formal attempts to define the field of digital humanities and its related centers has led to an "entire anthology devoted to the subject" (Terras, Nyhan, & Vanhoutte as cited by Sula, Hackney, & Cunningham, 2017). A literature review revealed that most current scholarship regarding DH Centers focuses on several distinct categories including: their history and background, definition, operations, initiatives, programs, nature and type, governance, and funding. As these entities continue working towards a shared identity, less scholarship examining their outlined missions and what they are doing to meet them exists, but some do come close.

Diane Zorich's *Survey of Digital Humanities Centers in the United States* (2008a) stands as the only comprehensive survey of DH centers to date. The detailed survey examines various aspects of DH Centers including: background and history, physical and virtual locations,

constituencies, governance, administration, operations, sustainability, partnerships, trends, and issues. For the purposes of this research, the survey also provides context for both the wide range of principles present in DH Centers' outlined missions, and how centers believe they achieve these goals through related activities. Although incredibly useful in building a foundation for this research, the survey is now over a decade old and the 32 surveyed organizations may not effectively represent the rising number of DH Centers across the nation. As of 2016, "the Alliance of Digital Humanities Organizations (ADHO) listed over 175 DH Centers, initiatives, labs, collectives, and networks" (Stergios, 2016). Similarly, centerNet, an international network of DH Centers, lists 202 DH Centers (n.d.).

Neill Fraistat's attempt to determine *The Function of Digital Humanities Centers at the Present Time* proposes that the ultimate function of these centers is to be "an agent of change" (2012), although he was unsure that they were truly committing to that goal at the time. Katy Kavanagh Webb also contributes to the conversation by providing the main impetus for individual centers' projects through detailed case studies of current Digital Humanities Centers and Labs (2018). These case studies investigate a number of aspects of DH Centers and Labs including what their physical spaces are used for, what kinds of projects they engage in, timelines of their development, partners, and funding. Lastly, Patrik Svensson envisions the field of digital humanities and its related Centers, offering "a personal visionary statement" for the future of the field (2012). Although this philosophical proposal sets in motion an ideal set-up for the entities of the field to follow, DH Centers are unlikely to become standardized given the differences in their origins, governance, operations, and functions.

A major talking point regarding DH Centers that is missing from previous scholarship is whether Digital Humanities Centers see the preservation of research data as important to their

missions. This is likely because DH Centers were still finding their grounding within the academic world, and more time needed to pass in order to bring to light a potential future challenge. The mission statements of current DH Centers, most developed prior to gaining a true understanding of the consequences of their research functions, don't specifically mention preservation of research data. Although many Centers include "providing funding, infrastructure, and technical assistance needed for digital humanities to thrive" (Zorich, 2008a, p.10) as purposes within their mission statements, they do not specify desires to ensure that their research data is preserved for future generations.

But as DH Centers around the world gain experience through the completion of projects over multiple years, "preservation is receiving greater attention" and most Centers "do acknowledge their obligation to preserve the process and results of their digital scholarship, and they are addressing the issue in various ways" (Zorich, 2008a, p.26). Literature focusing on this topic is typically from within the last few years only, and most of it is authored by individual DH Centers evaluating the preservation of their own research data. Jillian Harkness and the Ryerson Centre for Digital Humanities' *Research and Recommendation Report for Long-term Maintenance and Preservation of Born-Digital Scholarship* (2017) is an excellent example of one Center's attempt to strategize for preservation through collaboration and the exploration of data management plans. Bryan Carter's *Digital Humanities: Current Perspective, Practices, and Research* also approaches the topic of data archiving and storage, proposing numerous options such as backing up data on a hard drive or the utilization of cloud storage, although the literature is from 2013 and may be somewhat outdated in terms of current technology options.

The current scholarship shows that DH Centers vary greatly in their outlined mission statements, which are meant to address their purposes and how to achieve them. This variation

lends to uncertainties about shared goals, and what Centers are doing to meet their missions. Additionally, the absence of verbiage describing the preservation of research data poses the question of whether DH Centers see this activity as important to their mission (or not)? In my research, I will examine these inquiries deeper and approach the implications of such research on the future of DH Centers.

Research Design

The two primary methodologies used during research were meta-analysis and survey research in the form of open-ended, non-structured interviews with selected experts in the field. Meta-analysis of DH Centers laid the groundwork surrounding the topic, including their histories and backgrounds, outlined missions, and activities they perform to achieve their goals. In particular, relevant information from DH Centers' websites and publications was gathered to establish how these entities identify their missions and related activities. Open-ended, non-structured interviews were held to obtain unique insights from key professionals within DH Centers, and supplement the information provided in previous studies.

The first interview was conducted with Kristen Mapes, the Assistant Director of Digital Humanities at Michigan State University. Digital Humanities at Michigan State University (DH@MSU) conducts groundbreaking research and related scholarship at a national and international level, in addition to hosting the Global Digital Humanities Symposium each spring. The second interview was conducted with Mills Kelly, the Executive Director at the Roy Rosenzweig Center for History and New Media. The Roy Rosenzweig Center for History and New Media (RRCHNM) has developed more than sixty projects, including software and websites that are freely available to the public, in its 25 years of operation. The final interview was conducted with three staff members at the Digital Humanities Initiative: Janet Thomas

Oppedisano, previous Co-Director with the Digital Humanities Initiative and current Director with the LITS Academic Digital Initiatives; Lisa McFall, Associate Director, Metadata and Digital Initiatives; and Shay Foley, Director of Metadata and Digital Strategies. The Digital Humanities Initiative (DHi) is an interdisciplinary community which supports long-term faculty-led research projects.

Background

In true fashion for the field, the background of digital humanities (and its related Centers) is a contested topic. Many believe that Humanities Computing, to later be called "Digital Humanities," originated in 1949. Stergios explains, "It was the year when an Italian Jesuit, Father Roberto Busa, came to IBM, the only organization in the world that possessed the technology (punch card machines) and the expertise he needed to create a concordance of all the words in the works of St Thomas Aquinas—the *Index Thomisticus*" (2016). The project took over thirty years to complete and "endures as one of the earliest and most ambitious projects in the field that is now called digital humanities, with Busa since renowned as the founding father of the field" (Terras & Nyhan, 2016). Other scholars believe that although this account dominates historical views of the field, it raises various concerns. Sula and Hill outline four specific issues in accepting this storyline: "it privileges certain disciplines, projects, and tools at the expense of others; it fails to chart an actual historical path from early work in text analysis to 'big tent' DH; it precludes historicizing and contextualizing current work that falls outside of text analysis; and it suffers from a lack of evidence" (2017).

Regardless of this disagreement within the field, Father Roberto Busa received the first award for a life's work in the Digital Humanities in 1998, with the prize being named after him. What milestones then occurred between 1949, when Father Busa began his index, and 1998,

when he received the award; almost 50 years later? John Unsworth's compiled list of achievements, covering the date range of 1949 through 2012 when his post was published, offers some background in the development of the Digital Humanities (Appendix A). Of importance to note is how early DH Centers and organizations, as well as their related programs, were often formed as a means to complete a specific project, such as Wisbey's founding of the Centre for Literary and Linguistic Computing in Cambridge to support his work with Early Middle High German texts (Unsworth, 2012).

Further examination of key organizations and alliances dedicated to the field of Digital Humanities shows the evolution of the field. Below, I have itemized several organizations dedicated to the field of Digital Humanities, drawing attention to their dates of foundation and any previous names (Appendix B). These organizations "enable individual DH Centers to network internationally – sharing and building on projects, tools, staff, and expertise" (centerNet, n.d.), and "act as a community-based consultative and advisory force" (ADHO, n.d.). These organizations also stand as a resource for identifying DH Centers, as utilized for my own identification and selection of Centers to interview, but do not give suggestions in terms of Mission Statements or necessary activities. Without strict guidelines, DH Centers' mission statements "represent an eclectic mix of content, form, and varying levels of clarity" (Zorich, 2008a, p.10).

Organization Name	Founding Year	Previously Known As
European Association for Digital Humanities (EADH)	1973	Association for Literary and Linguistic Computing
Association for Computers and the Humanities (ACH)	1978	

Canadian Society for Digital Humanities (CSDH)	1986	Consortium for Computers in the Humanities
Consortium of Humanities Centers and Institutes (CHCI)	1988	
Alliance of Digital Humanities Organizations (ADHO)	2005	
centerNet	2007	
Australasian Association for Digital Humanities (aaDH)	2011	
Japanese Association for Digital Humanities (JADH)	2011/2012	
Humanistica	2014	

Mission Statements

Mission statements help determine an organization's direction, and sum up its desired objectives, strategies, and values. Mission statements also guide the organization by focusing its staff's energy and attention on ideas that will fulfill the organization's goals. Through the examination of outlined missions, one can better understand the desired purposes of an entity or group of similar entities, such as DH Centers. Patterns emerge that make shared goals evident, but because "DH Centers are self-defined entities" (Zorich, 2008a, p.4), there is great variety within their outlined missions. This freedom lends to some difficulty when searching for related categories. In order to establish a baseline for the mission statements of DH Centers, a unique methodology was utilized (Appendix C).

Using relevant information from DH Centers' websites, related purposes can be found despite the overall diversity of goals. A significant number of DH Centers focus on the following broad categories: providing a physical/virtual space/home to local users; supporting related

faculty, staff, and students with resources, technical support, and infrastructure; collaborating in cross-disciplinary/interdisciplinary scholarship; training, mentoring, and educating a new generation of digital humanities scholars; progressing the field of digital humanities; investigating and challenging known history; sharing and exchanging knowledge; supporting research in the field; developing and using digital tools and practices for humanities research; investigating how digital technologies and methods are changing research; pedagogy; producing, developing, and supporting digital humanities projects; and encouraging participation and discussion of digital humanities. These categories suggest that DH Centers, in their simplest forms, exist to support current and future digital humanities activities in a number of ways.

The information provided from DH Centers' mission statements also provides clues as to what factors may affect their chosen goals and activities. One of the first factors that may affect how DH Centers define their missions is the identification of which communities they wish to serve. Most DH Centers identify their constituents within their mission statements or online published information on their websites. For example, the Humanities Technology (HumTech) identifies itself as "the technology home for faculty, staff and students in the Humanities Division at UCLA" (n.d.). Other DH Centers seek a much broader audience of users, such as the CSUN Center for Digital Humanities, which seeks to serve "the university, the immediate community, and society at large" (n.d.). In total, DH Centers identify any of the following communities within their outlined mission statements or available published information: DH scholars, society at large, academics worldwide, the public, their affiliated University's staff, students, and faculty; tenure-track Professors, K-16 students, affiliated Libraries, global network of computer and social sciences, their own Institution, and individuals within related fields such

as the Arts, New Media, and Communication. In identifying which communities to serve, DH Centers must also choose related activities and functions that will be useful to them.

Another factor that may affect how DH Centers define their missions is whether they have a specific research domain or concentration. Many DH Centers have particular focuses that affect the development of their mission statements. The Perseus Digital Library focuses its staff's attention upon "the Greco-Roman world and upon classical Greek and Latin" (Perseus Digital Library, n.d.). The Roy Rosenzweig Center for History and New Media, described in detail later within this paper, focuses specifically on "democratizing history" (RRCHNM, n.d.), and other history-related endeavors. The Loyola Center for Textual Studies and Digital Humanities sponsors research in "the interdisciplinary area of textual studies" (CTSDH, n.d.), in addition to digital humanities. These examples stand as evidence that the specific disciplines of DH Centers affect how they define their missions, thus determining which activities to engage in. For example, a Center with a defined focus on text mining will likely perform functions that will advance that specific area of the digital humanities field. Utilizing the strengths of their affiliated staff and faculty influences how a DH Center outlines its goals.

Funding needs may also affect how DH Centers define their missions. Because DH projects require funding and resources, the availability of these, in addition to who provides them to the Center, is extremely relevant. If a DH Center is located within a University Department or on-campus, the University may provide funding in exchange for another benefit, such as an increased reputation or public credit. The Center of Digital Humanities Research (CoDHR) states that its aim is "to garner international recognition for Texas A&M University through development of significant digital humanities research projects" (n.d.). Examples such as this

may result in the DH Center consistently engaging in DH projects and related research to produce worthwhile scholarship and tools.

Funding agencies' requirements, such as those of the Office of Digital Humanities with the National Endowment for the Humanities (NEH), may also affect how DH Centers develop their mission statements. The Office of Digital Humanities is a great example of how other fields, especially the sciences, have motivated progression within the digital humanities. NEH took note when the *Revolutionizing Science and Engineering Through Cyberinfrastructure: Report of the National Science Foundation Blue-Ribbon Advisory Panel on Cyberinfrastructure* (2003) recommended research related to "cyberinfrastructure," and its importance in preserving and promoting data science. This report inspired another, released by the American Council on Learned Societies (ACLS) three years later. *Our Cultural Commonwealth: The Report on the ACLS Commission on Cyberinfrastructure for the Humanities and Social Sciences* (2006), "provided a road map for the field's [digital humanities] growth. Written by digital humanities pioneers, the report recommended that funders such as NEH invest in technology infrastructure for the humanities, fund projects that foster open access, encourage digital scholarship, and support the creation of digital collections" (Hindley, 2018).

In order to fulfill this calling, NEH brainstormed approaches to support digital humanities projects. In 2008, "NEH Chairman Bruce Cole gave the go-ahead to create the Office of Digital Humanities (ODH)" (Hindley, 2018), and the office has been funding digital humanities projects ever since. NEH states that its Digital Humanities Advancement Grants may involve: "creating or enhancing experimental, computationally-based methods, techniques, or infrastructure that contributes to the humanities; pursuing scholarship that examines the history, criticism, and philosophy of digital culture and its impact on society; or conducting evaluative studies that

investigate the practices and the impact of digital scholarship on research, pedagogy, scholarly communication, and public engagement" (2019). In order to be more successful in obtaining these grants, DH Centers may include specific language related to such activities within their mission statements, in addition to grant applications. Many of the examined DH Centers include similar terms within their mission statements, such as "infrastructure," "examination of history," "pedagogy," and "scholarly communication."

Selected DH Centers

To supplement the meta-analysis of DH Centers, open-ended non-structured interviews were also held to obtain unique insights from key professionals within the field, and supplement the information provided in previous studies. These interviews were held with the following DH Centers and individuals:

- Kristen Mapes, the Assistant Director of Digital Humanities at Michigan State University (DH@MSU)
- Mills Kelly, the Executive Director at the Roy Rosenzweig Center for History and New Media (RRCHNM)
- Janet Thomas Oppedisano, previous Co-Director with the Digital Humanities Initiative and current Director with the LITS Academic Digital Initiatives; Lisa McFall, Associate Director, Metadata and Digital Initiatives; and Shay Foley, Director of Metadata and Digital Strategies at the Digital Humanities Initiative (DHi)

In contacting DH Centers to interview, only U.S.-based centers were considered because of time and logistical constraints. Other than the U.S. focus, diversity was sought in terms of

physical locations across the nation, missions, and main activities. Other factors that affected the selection of interview participants were availability of DH Centers to be interviewed, current faculty leaders, and founding dates.

Backgrounds of Selected DH Centers

The three DH Centers examined within this research differ slightly in terms of founding dates, backgrounds, administrative affiliations, physical locations, and even how they define themselves. In addition to these differences, the Centers are spread out across the nation. These variations provide a diverse look at the current status of DH Centers in the United States. Despite these differences, all three Centers were developed within 20 years of each other, within the late 20th and early 21st centuries, during a time of significant growth for the field. All three Centers also engage in DH-related activities, and have contributed significantly to the community overall. Each of these DH Centers is described briefly below as background to the interviews.

Digital Humanities at Michigan State University (DH@MSU) is "the space where a variety of different DH initiatives around campus come together" (DH@MSU, n.d.). Because of this, choosing a founding date can be difficult. As Assistant Director Kristen Mapes explained, "There are founding dates for specific units, but DH@MSU does not have a set date" (2019), although important events help develop a timeline: in 2012, the first Director was chosen; a dedicated website was created between 2014-2015; and Bylaws for the entity were approved in 2018. Administratively, DH@MSU is based in the College of Arts and Letters, although it's considered "an umbrella in which Digital Humanities happens" (Mapes, 2019) across the various colleges and units of the university.

In terms of physical location, there is not one central space for DH@MSU. Its activities are scattered across various physical spaces on MSU's campus, in which they list eight locations including MATRIX, Center for Digital Humanities and Social Sciences, and the Digital Scholarship Lab (DH@MSU, n.d.). Because of this, DH@MSU staff members see themselves as more of a "community group on-campus" (Mapes, 2019) than a DH Center in the traditional sense, although they understand the affiliation. Their main goal is to bring together the different silos of DH across MSU to build an engaged community, but not necessarily by providing a physical meeting space.

The Roy Rosenzweig Center for History and New Media (RRCHNM) was founded in 1994. RRCHNM considers itself to be the first established DH Center, celebrating their 25th anniversary this year, due to their development following the "first DH project in history" (Kelly, 2019). Its founding director, and namesake, Roy Rosenzweig served as lead author and co-creator of the Who Built America? CD-ROMs that "launched the field of digital history" (RRCHNM, n.d.). A copy of the affiliated CD-ROM was included inside a pocket of each textbook of the same name. The Center's origins lay in an agreement between the American Social History Project and George Mason University in 1990 that provided time for Rosenzweig to work on the aforementioned project (RRCHNM, n.d.), and inspired him to propose establishing a Center for History and New Media.

Administratively, RRCHNM is a research center based in the Department of History and Art History at George Mason University. In terms of physical location, it is housed in a separate building across from their associated Department. When asked if RRCHNM considers themselves a DH Center, Executive Director Mills Kelly stated that they do, although he felt it was necessary to note that "all of the work they do focuses on history" (2019). Unlike some DH

Centers, RRCHNM has a very specific research domain that guides their various activities and functions. But, as their name hints, they still engage in these activities through the use of new media and technology.

The Digital Humanities Initiative (DHi) is an interdisciplinary collaboratory that has been in discussion since 2008, when a small grant was awarded to develop a co-curricular center at Hamilton College. The center did not have its formal inception until a year later in 2009 (Oppedisano, McFall, & Foley, 2019), following a period of research. Administratively, DHi is an academic center within the college. In terms of physical location, DHi is "housed within the traditional Beaux-Arts shell of Hamilton College's former library in Christian Johnson Hall, on the main quad of the campus" (DHi, n.d.). The Center's location is well-defined as, "…a space of about 750 square feet, …providing six discrete spaces: DHi Operations, two offices, lounge, storage, and a group collaboratory space" (DHi, n.d.).

Although the group previously thought they did not need a physical central area, they found themselves pressured to develop one. As previous Co-Director Janet Thomas Oppedisano stated, "Without a physical space within an academic center, you don't exist" (2019). Despite this, DHi does not refer to themselves as a DH Center specifically, choosing instead to use their namesake label as an "initiative" (Oppedisano, McFall, & Foley, 2019), but recognizes that they may be considered as such. With a physical space for collaboration to promote investigations into DH ideas, DHi is able to connect its constituents in-person, as well as virtually.

Mission Statements of Selected DH Centers

DH@MSU is the only interviewed DH Center that does not have a formal published mission statement. Mapes considers their Bylaws and website information to be the most formal

outlining of missions they currently have (2019). DH@MSU Bylaws, which are posted on their public website, state that its goals are to "bring the participating units together in order to build on diverse strengths, to facilitate collaborations among them, and to support their independent and shared projects, seeking collectively to increase recognition of DH@MSU as a national and international leader in advanced, innovative research and scholarship" (2018). The Bylaws were the result of an Advisory Board, a development meant to codify functions that have already been going on for some years now. As Mapes explained, "We are structured differently than some other Centers – we are not located within a Department, and we are not driven by one focus" (2019). This structure will allow DH@MSU the opportunity to craft a mission statement in the future, something they plan to do, after gaining experience and footing.

RRCHNM's mission statement was originally developed the year of its inception, in 1994, and tweaked in 2005. It states, "We use digital media and computer technology to democratize history: to incorporate multiple voices, reach diverse audiences, and encourage popular participation in presenting and preserving the past" (RRCHNM, n.d.). Kelly believes the biggest differences in its mission statement, as compared to other DH Centers, comes down to two factors – RRCHNM has "retained their focus on democratizing information related to history all along…and they are a separate research center located within a Department, as opposed to being located within a Library" (2019).

DHi's mission statement has evolved over time, but was altered two years ago to reflect a deeper focus on collaborative research. The mission statement reads, "DHi is an interdisciplinary collaboratory supporting long-term faculty-led research projects. DHi is a co-curricular center at the College whose goals include: developing scholar's understanding of digital research methods and tools, integrating student collaborators into faculty research

projects, connecting scholars with related research interests nationally and internationally, promoting 'big ideas' in digital humanities investigations, assisting faculty in securing funds for and managing research projects, and facilitating translations of research into curricula" (DHi, n.d.). Oppedisano feels that their mission statement reflects their curricular and pedagogical initiatives, and believes that the missions of other DH Centers may depend on whether or not they've merged with I.T. or Library systems (2019).

Activities of Selected DH Centers

In order to meet their outlined missions, DH Centers engage in a variety of activities. DH@MSU focuses on bringing their participating units together through community building and skill sharing events. These include a mini-symposium series and the Global Digital Humanities Symposium, "which brings together scholars from around the world to discuss and critique the relationship of DH to/with the global" (DH@MSU, n.d.). Additionally, their pedagogical endeavors include offering an undergraduate minor, a graduate certificate in Digital Humanities, and a fellowship program for graduate students in Cultural Heritage Informatics (DH@MSU, n.d.). In serving its students and faculty members, DH@MSU supports their independent and shared projects in order to facilitate innovative research and scholarship. DH@MSU also offers funding opportunities including a Graduate Arts fellowship, conference funding, summer program funding, and "seed grants to support digital humanities projects in research, teaching, and public outreach" (n.d.).

RRCHNM stays right on target with their mission of democratizing history through three main areas of work: software development, public humanities projects, and education projects for teachers and students (Kelly, 2019). Of the utmost importance is that all products created

through the activities of RRCHNM are free to its users. To date, RRCHNM has developed more than sixty projects including "online resources for teachers; online collections, exhibits and collecting sites; open-source software; and forums to develop knowledge and build community among those in the humanities working with digital technology" (RRCHNM, n.d.). Perhaps the Center's most famous project is *Omeka*, which has "established itself as a leading open source web publishing platform for digital collections" (RRCHNM, n.d.). Since its launch, *Omeka* has been downloaded over 150,000 times. It "provides a free and open source answer to the need for a web publishing platform that honored the importance of standards-based metadata and that allowed their content experts to showcase their unique knowledge about their collections" (RRCHNM, n.d.).

DHi, at Hamilton College, meets its outlined missions and goals by working directly with faculty and students on specific research. They "supply advice, training, and structure," in areas such as organizational methods, how to make materials accessible and discoverable to the public, and the role of metadata (Oppedisano, McFall, & Foley, 2019). All of DHi's projects are collaborative efforts, meant to further their mission of promoting ideas in DH investigations. Some notable projects include the American Prison Writing Archive, "a place where imprisoned people and prison staff can write about and document their experience," and Cult of Confucius, "a virtual Confucius Temple that allows the user to enter a temple to explore the sights and sounds" (DHi, n.d.). In order to complete their desired projects successfully, DHi has developed a Project Process (Figure 3) for reference (n.d.). This process reiterates their focus on completing projects that fulfill their outlined missions.

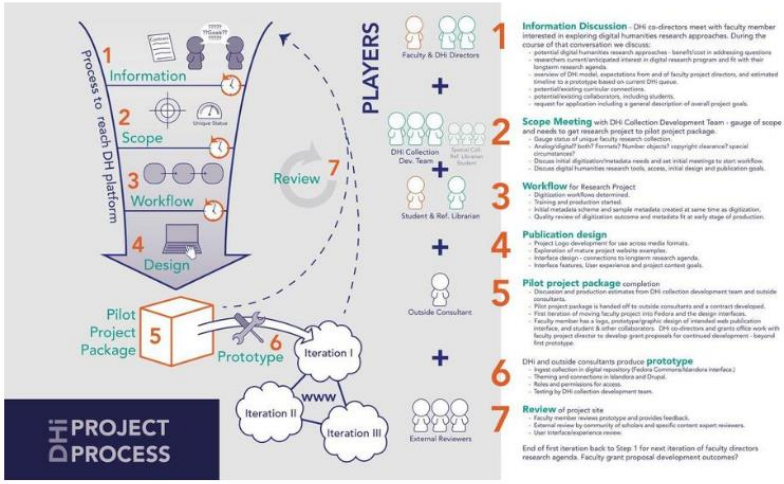

Figure 1

Data and Preservation of Selected DH Centers

Through their various activities, DH Centers are often producers of unique research data. Despite this, the preservation of research data is a goal that is often missing from DH Centers' outlined mission statements. To gain a better understanding of the relationship DH Centers have with their research data, the selected DH Centers were questioned on various matters regarding the topic. In terms of how much research data they produce, all three centers noted that it depends on the project or unit that creates it, in addition to what is actually defined as such (Oppedisano, McFall, & Foley, 2019). The selected DH Centers approach long-term preservation of their research data in different ways. DH@MSU does not have a specific policy in place across their various units, but some groups do have their own strategies. The Center tries to assist its faculty and students in defining what their long-term plan is for their research, and supplies handout sheets for digital preservation tips and consultations. DH@MSU is now working on setting up new ways to preserve data through conversations with the university's Data Librarian, noting that working closely with their university's libraries has been helpful (Mapes, 2019).

RRCHNM is actively working towards resolving some of the issues inherent to the long-term preservation of research data. When DH projects were kicked off their sites by local administrators, Roy Rosenzweig offered to store their data. Some of these projects were from other Departments on-campus, such as the Speech *Accent* Archive from the Linguistics Program in the Department of English. This site was "established to uniformly exhibit a large set of speech accents from a variety of language backgrounds…and allows users to compare the demographic and linguistic backgrounds of the speakers in order to determine which variables are key predictors of each accent" (George Mason University Linguistics Program, n.d.).

Other projects, such as Harvard University's DoHistory site, were developed off-campus prior to being hosted by RRCHNM. The DoHistory site invites users "to explore the process of piecing together the lives of ordinary people in the past. It is an experimental, interactive case study based on the research that went into the book and film *A Midwife's Tale,* which were both based upon the remarkable 200-year-old diary of midwife/healer Martha Ballard" (Harvard University's Film Study Center, n.d.). This past activity has forced RRCHNM to now "clean house," as their servers have projects on them dating back to the 1990's. To do so, they are "flattening out" three-dozen sites and moving them to the library's digital archives (Kelly, 2019), including the aforementioned Speech *Accent* Archive. Using the library's infrastructure is one way that RRCHNM is able to work towards long-term preservation of their research data, with another being a small endowment that generates a bit of money each year to help with sustainability, although Kelly notes that it is not enough (2019).

DHi at Hamilton College is actively working towards the long-term preservation of data within their archive-based projects, but it is an extremely high-maintenance and expensive activity. Oppedisano noted, "At a certain point, there's questions about the institution taking on

the burden of maintaining the information over time. It becomes bigger than a research project. It becomes owned not only by the faculty member(s) that produced it, but also the institution and the public accessing that information" (2019). This brings up multiple unique issues regarding ownership of research data. Oppedisano continued, "We weren't aware of all of the different stakeholders that could be involved in any one of these DH projects, or the extent to which support, maintenance, and different ways of accessing and processing this information was going to affect the situation" (2019). The unforeseen consequences of long-term preservation of research data, as explained by Oppedisano, is an idea echoed throughout published literature on the subject.

Although none of the selected DH Centers specifically assert the importance of preservation of their research data within their outlined mission statements, all hint at this pursuit in one way or another. DH@MSU Bylaws mention "projects," "research," and "scholarship" (2018); while DHi's includes "research projects," and "securing funds for managing" those projects (n.d.). These defined functions and their related activities result in the production of research data, thus creating the need to preserve the information long-term. RRCHNM's mission statement astutely notes their desire to "encourage popular participation in presenting and preserving the past" (n.d.), with an emphasis here on "preserving." Similarly, all three Centers agree that the preservation of research data is important to DH Centers' various missions, including their own.

Mapes, with a background as a Librarian, believes that the preservation of research data is important to DH Centers' missions, and specifically, to MSU's DH community because of their dedication to scholarship and research (2019). Kelly, as a Historian, sides with the feeling that "everything should be saved" (2019), noting that preserving research data from DH projects

is essential. Foley, as the Director of Metadata and Digital Strategies at DHi, has knowledge of how much history can be lost when research data is not preserved (2019). This past experience has shaped his view of the importance of preserving research data, although he admits that doing so is not easy in any sense. Despite differences in their specific roles at DH Centers, each interviewee identified the importance of the preservation of research data. The disparity between recognizing the significance of this activity and implementing language regarding it within their mission statements can be explained as the result of two influences – time, and lack of standardized strategies and funding for the ongoing process.

Assuming that most DH Centers wrote their mission statements around the same time that they were established, the statements may be outdated today. Consider DH Centers that were founded in the 90's – they would be unaware of the upcoming waves of technology and the inherent issues tied to it. In writing mission statements before they gained any real-world experience, DH Centers were stuck within the causality dilemma. They were developing goals and missions based off of current trends in an evolving field. As the realm of digital humanities continued to expand and branch off into areas of specialty and domain focuses, DH Centers continued building their values around what niche felt suitable to them. They did not know that the activities they performed to fulfill their missions would produce a significant amount of unique research data that would prove valuable to each Center, despite their individual purposes. Even now that this consequence is very much known, solutions to handle the inherent difficulties of preserving research data are not widely available.

Some strides have been made in the realm of research data preservation, but it is simply not enough. Funding agencies, such as the Institute of Museum and Library Services (IMLS) and the National Endowment for the Humanities (NEH), are now requiring applicants to consider

data management and sustainability. Ashley Sands, a Senior Library Program Officer at IMLS, stated that the organization supplies applicants with its own version of a Data Management Plan, called a Digital Product Form (2019). This form ensures that they comply with current laws and statutes, including making the data accessible and open source. The template has four sections: Intellectual Property Rights and Permissions; Digital Content, Resources, or Assets; Software; and Research Data (IMLS, n.d.). These sections cover topics such as intellectual property status, copyright(s), description of the digital content that will be created or collected, quality control plans, plans for preserving and maintaining digital assets during and after the award period, metadata and strategies for preserving and maintaining it, accessibility, software and its functions, technical information, repository information, protection of sensitive information, and how frequently the presented data management plan will be reviewed (IMLS, n.d.). Even though IMLS supplies applicants with broad instructions in addition to providing the Digital Product Form, they do not recommend specific methods for data management. Additionally, Sands noted that "DH products are often very complex, so their software is even more difficult to preserve" (2019).

Jennifer Serventi, a Senior Program Officer with the Office of Digital Humanities at NEH, explained that the Digital Humanities Advancement Grants program requires a data management plan for all of its applicants. Similarly, other NEH award programs also "require applicants to discuss data management and sustainability" (Serventi, 2019). Although NEH does not provide a specific template like IMLS does, they do outline what topics they want addressed within the required data management plan, including:

> • the types of data that your project might generate and eventually share with others, and under what conditions, including, if relevant, a discussion of policies about public

> access and sharing provisions to ensure protection of privacy, confidentiality, security, intellectual property, and other rights or requirements
> • how data and metadata will be managed and maintained and by whom, including a discussion of physical and cyber resources and facilities that will be used to effectively preserve and store research data (these can include third-party facilities and repositories)
> • for projects involving partnerships with industry or other user communities, a discussion of how data will be shared and managed with partners, institutional affiliates, and other major stakeholders
> • factors that might impinge on the ability to manage data, for example, legal and ethical restrictions on access to non-aggregated data
> • the lowest level of aggregated data that project directors might share with others in the scholarly or scientific community, given that community's norms on data;
> • the mechanism(s) for sharing data and/or making it accessible to others, including addressing how timely access to data will be assured
> • other types of information that should be maintained and shared regarding data, for example, the way it was generated, analytical and procedural information, and the metadata
> (NEH, 2019, p.17)

In summarization, "the plan should identify what data your project will generate and/or collect; describe how your team will manage and disseminate data, including outlining the rights and obligations of all parties with respect to their roles and responsibilities in the management and retention of research data and how changes to project staffing will impact this; and explain any costs stemming from the management of data in the budget justification" (NEH, 2019, p.16).

Although NEH's data management plan requirement, and IMLS' Digital Product Form, are incredibly helpful in guiding applicants towards dedicated data management strategies and sustainability efforts, the financial burden falls on the applicant. Because "…much of the

research is funded through grants that have inevitable end points (Harkness, 2017), the ongoing costs characteristic of long-term maintenance of data still need to be covered. As Kelly noted, "Nobody, that I'm aware of, is giving funding specifically to support sustainability" (2019). This burden is not light, as the preservation of research data (in particular, born-digital scholarship) is high-maintenance and expensive.

In addition to the financial burden of research data preservation, "the independent nature of DH Centers has given rise to several concerns…including a lack of the large-scale, coordinated efforts needed to build a humanities cyberinfrastructure and address marquee research issues" (Zorich, 2008b, p.76). Without clear guidelines and standards for DH Centers regarding the preservation of their research data, most Centers are borrowing strategies and best policies from related fields such as digital curation, libraries, and the sciences. The *Revolutionizing Science and Engineering Through Cyberinfrastructure: Report of the National Science Foundation Blue-Ribbon Advisory Panel on Cyberinfrastructure* "is premised on the concept of an advanced infrastructure layer on which innovative science and engineering research and education environments can be built" (2003, p.5). The proposed vision "requires enduring institutions with highly competent professionals to create and procure robust software, leading-edge hardware, specialized instruments, knowledge management facilities, and appropriate training" (Atkins & NSF, 2003, p.7). This report's various recommendations led to the requirement of Data Management Plans by the National Science Foundation (NSF), and later inspired other federal agencies, including IMLS and NEH, to do so as well.

Although DH Centers picked up some of the recommendations within the NSF report, such as requiring Data Management Plans for project funding, they are still waiting to act upon others. Another report, *Our Cultural Commonwealth: The Report on the ACLS Commission on*

Cyberinfrastructure for the Humanities and Social Sciences called for "new federal funding…for cyberinfrastructure in the humanities and social sciences and also for research and demonstration projects that explore new, sustainable business models for digital humanities and social sciences" (ACLS & Unsworth, 2006, p.26); yet these issues still exist. If DH Centers could move past the silo-type nature of their pasts, they might recognize that the preservation of research data is undoubtedly a shared mission across the board; an obstacle that they could work together towards resolving.

Conclusion

The unique status of DH Centers as individual entities, with the freedom to define themselves and their related activities, has led to a great diversity of goals within their mission statements. DH Centers' mission statements "represent an eclectic mix of content, form, and varying levels of clarity" (Zorich, 2008a, p.10), although broad categories of similarities do exist. Overall, DH Centers aim to: provide a physical/virtual space/home to local users; support related faculty, staff, and students with resources, technical support, and infrastructure; collaborate in cross-disciplinary/interdisciplinary scholarship; train, mentor, and educate a new generation of digital humanities scholars; progress the field of digital humanities; investigate and challenge known history; share and exchange knowledge; support research in the field; develop and use digital tools and practices for humanities research; investigate how digital technologies and methods are changing research; develop pedagogy; produce, develop, and support digital humanities projects; and encourage participation and discussion of digital humanities. Additionally, "A common foundation that underlies all DH Centers' mission statements is the desire to transform humanities scholarship" (Zorich, 2008b, p.71).

Despite the presence of insinuating phrases within their mission statements, and the consistency of DH Centers engaging in related activities, the preservation of research data is a function that is missing from the outlined missions of DH Centers. Whether this is because of the time in which the statements were constructed, or the lack of standardized strategies and funding for the ongoing process, DH Centers should now consider re-visiting their outlined mission statements. Assessing the present value of their mission statements may show DH Centers that their current activities and goals no longer match up to their past ideals and visions for themselves. Now that DH Centers have gained sufficient experience in operations and the consequences of their daily undertakings, the preservation of their research data shines as highly relevant to their overall purposes.

With each digital humanities project they request funding for, DH Centers confront the requirement of Data Management Plans from the major federal funding agencies. What began as a requirement for scientific research soon found its way to this new, exciting field as well. Observing the lessons put forth by scientific researchers, federal funding agencies recognized that the creation of a data management plan should be as good as the proposed research, in order to ensure the longevity of the data, and success of the project long-term. To fulfill their ambitions towards inclusivity and the elimination of boundaries, DH Centers must be at the forefront of ensuring continuing access to their materials. They must recognize the importance of their data to not only this generation and the next; but also, future constituents and societies. This means adopting, and prioritizing, statements of dedication towards the task within their public, outlined missions.

Further, and continued, investigations into appropriate strategies and standards for the preservation of research data created by DH Centers is necessary to overcome the inherent

difficulties this task presents. Finding ways to combat the "silo-like nature of current centers [which] is creating untethered digital production that is detrimental to the needs of humanities scholarship" (Zorich, 2008a, p.1) is pivotal for multiple reasons. Walters and Skinny note that, "a silo-based approach is neither cost effective nor as sustainable as a more unified, campus-wide, and even multi-institutional approach" (2011, p.16). It is time for DH Centers to collaborate on more than just projects; they must no longer seek individual solutions to shared problems. Regardless of their individual expertise or focuses, all of the tools and materials being produced by DH Centers are invaluable to society, and the public at large. Finding efficient and sustainable practices that can be standardized and shared amongst Centers is one way to alleviate the ongoing weight of data management.

The financial burden of research data preservation is another concern that must be addressed in order for DH Centers to continue evolving and progressing. Requiring data management plans and conversations regarding sustainability for funding is a good place to start, but agencies that fund digital humanities projects must realize two things: first, DH Centers with less resources will be unable to compete for funding if they cannot prove that they, themselves, can sustain the data long-term; and secondly, funding digital humanities projects without ensuring that the research can be preserved could potentially cost more. Imagine a funding agency finances a great digital humanities endeavor, only for the research to later be lost due to the inability of the DH Center to keep up with the ongoing costs of preservation. The loss of invaluable research data is a price no one can pay. In order for DH Centers to continue thriving and contributing to academia, funding agencies should consider providing financial support towards sustainability. If not the current main agencies, then perhaps the creation of national centers could step in.

Another option worth exploring is the possibility of a collaborative grant proposal. Other fields have found success with such a set-up, including HathiTrust Digital Library and Research Center, and Inter-university Consortium for Political and Social Research (ICPSR). HathiTrust, "as a co-managed and co-funded collaborative of academic and research libraries, relies on its members to govern its programmatic, financial, and strategic directions…with a separately maintained budget held within the University of Michigan budget system and managed by the Executive Director with oversight from the Executive Committee" (HathiTust, n.d.). ICPSR is "an international consortium of more than 750 academic institutions and research organizations…and receives grants from a number of government agencies and private foundations" (ICPSR, n.d.). Both groups have created national and global communities of organizations with similar goals, and act as agents in securing and disseminating funds and resources. DH Centers could benefit tremendously from a similar type of association for grants and funding purposes. Further research into this topic is essential, and as each wave of DH projects passes, new lessons will surely be learned.

DH Centers work as stewards of the digital humanities; a field which will continue to evolve. Similar to museums, DH Centers must strive to remain relevant, but this requires the ability to be adaptable and transformative. Using experiences that they've gained over the past few decades to guide them, DH Centers must begin building upon the foundations they have laid. No longer are they developing a vision for the future, they *are* the future. They are creating the tools that bring the past to the present; and they must also seriously consider what is to come. This means re-visiting their outlined mission statements, and updating them as necessary to reflect their present goals and pressing issues. The preservation of research data is a task that cannot go undone if DH Centers want to continue promoting openness, access, and the sharing of

knowledge. Because one day, what we call “digital humanities” will simply be known as “the humanities” again, when technology is naturally enveloped in all that we do. DH Centers’ missions and activities need to be geared towards ensuring that they remain leaders in providing the story of humanity to as many people as possible, for just as long.

References

Alliance of Digital Humanities Organizations (ADHO). (n.d.). About. Retrieved from http://adho.org/about.

American Council of Learned Societies (ACLS) & Unsworth, J. (2006). Our Cultural Commonwealth: The Report on the ACLS Commission on Cyberinfrastructure for the Humanities and Social Sciences. Retrieved from https://www.acls.org/uploadedFiles/Publications/Programs/Our_Cultural_Commonwealth.pdf.

Atkins, D.E. & National Science Foundation (NSF). (2003). *Revolutionizing Science and Engineering Through Cyberinfrastructure: Report of the National Science Foundation Blue-Ribbon Advisory Panel on Cyberinfrastructure*. Retrieved from https://www.nsf.gov/cise/sci/reports/atkins.pdf.

Carter, B. (2013). Digital Humanities: Current Perspective, Practices, and Research. Retrieved from https://ebookcentral.proquest.com/lib/jhu/reader.action?docID=1593392.

Center of Digital Humanities Research (CoDHR). (n.d.). About Us. Retrieved from http://codhr.dh.tamu.edu/about-us/.

Center for Textual Studies and Digital Humanities (CTSDH). (n.d.). About. Retrieved from https://www.luc.edu/ctsdh/about/.

CenterNet. (n.d.). About. Centers. Retrieved from https://dhcenternet.org/.

CSUN Center for Digital Humanities. (n.d.) Mission. Retrieved from http://www.csun.edu/digitalhumanities/mission.

Digital Humanities at Michigan State University (DH@MSU). (n.d.). About. Places. Funding Opportunities. Retrieved from http://digitalhumanities.msu.edu/.

Digital Humanities at Michigan State University (DH@MSU). (2018). DH@MSU Bylaws. Retrieved from https://drive.google.com/file/d/1r6Oj3-cuC88Pi00QAlhJPW7NjCB0ARVI/view.

Digital Humanities Initiative (DHi). (n.d.). About DHi. Projects. Our Process. Retrieved from https://www.hamilton.edu/academics/centers/digital-humanities-initiative.

Fraistat, N. (2012). The Function of Digital Humanities Centers at the Present Time. In *Debates in the Digital Humanities*. University of Minnesota Press. Retrieved from https://minnesota.universitypressscholarship.com/view/10.5749/minnesota/9780816677948.001.0001/upso-9780816677948-chapter-28.

George Mason University Linguistics Program. (n.d.). The Speech *Accent* Archive. Retrieved from http://accent.gmu.edu/index.php.

Harkness, J. (2017). Research and Recommendation Report Long-term Maintenance and Preservation of Born-Digital Scholarship. Retrieved from https://www.ryerson.ca/content/dam/cdh/CDH_RULA_Report_Final.pdf.

Harvard University's Film Study Center. (n.d.). DoHistory. Retrieved from http://dohistory.org/.

HathiTrust. (n.d.). Governances. Finances. Retrieved from https://www.hathitrust.org/governance#.

Hindley, M. (2018). The Office of Digital Humanities Turns Ten. In the Spring 2018 issue of *Humanities*. Vol. 39, No. 2. Retrieved from https://www.neh.gov/humanities/2018/spring/feature/the-office-digital-humanities-turns-ten.

Humanities Technology (HumTech). About Us. Retrieved from https://humtech.ucla.edu/about/.

ICPSR. (n.d.). About ICPSR. Retrieved from https://www.icpsr.umich.edu/icpsrweb/content/about/.

Institute of Museum and Library Services (IMLS). (n.d.). Digital Product Form. Expiration Date: 8/31/2021. Retrieved from https://www.imls.gov/sites/default/files/digitalproduct.pdf.

Kelly, M. (2019). Executive Director at Roy Rosenzweig Center for History and New Media (RRCHNM). Personal correspondence.

Mapes, K. (2019). Assistant Director of Digital Humanities at Michigan State University (DH@MSU). Personal correspondence.

National Endowment for the Humanities (NEH), Office of Digital Humanities (ODH). (2019). Funding Opportunity Title: Digital Humanities Advancement Grants. Retrieved from

https://www.neh.gov/sites/default/files/inline-files/Digital-Humanities-Advancement-Grants-NOFO-January-2020.pdf.

Oppedisano, J., McFall, L., & Foley, S. (2019). Various employees at the Digital Humanities Initiative (DHi). Personal correspondence.

Perseus Digital Library. (n.d.). Research. Retrieved from https://www.perseus.tufts.edu/hopper/research.

Roy Rosenzweig Center for History and New Media (RRCHNM). (n.d.). Our Story. What We Do. Retrieved from https://rrchnm.org/.

Sands, A. (2019). Senior Library Program Officer at Institute of Museum and Library Services (IMLS). Personal correspondence.

Serventi, J. (2019). Senior Program Officer in the Office of Digital Humanities at the National Endowment for the Humanities (NEH). Personal correspondence.

Stergios, G. (2016). A Review of Selected Digital Humanities Centers and Initiatives. Retrieved from http://darthcrimson.org/portfolio/a-review-of-selected-digital-humanities-centers-and-initiatives-march-2016/.

Sula, C., Hackney, S.E., & Cunningham, P. (2017). A Survey of Digital Humanities Programs. Retrieved from https://pdfs.semanticscholar.org/d17f/dbe050c14fcc232963310213245849bb7008.pdf?_ga=2.261804046.201321508.1570467966-374087535.1570467966.

Sula, C. & Hill, H. (2017). The Early History of Digital Humanities. Retrieved from https://pdfs.semanticscholar.org/84ce/a7b4afb75227395e20776f373a67854590a6.pdf?_ga=2.211224085.186896139.1573790296-240264176.1573692743.

Svensson, P. (2012). *Envisioning the Digital Humanities* from DHQ: Digital Humanities Quarterly, Vol. 6, No. 1. Retrieved from http://www.digitalhumanities.org/dhq/vol/6/1/000112/000112.html.

Terras, M. & Nyhan, J. (2016). *Father Busa's Female Punch Card Operatives* from Debates in the Digital Humanities, edited by Matthew Gold & Lauren Klein. Retrieved from https://ebookcentral.proquest.com/lib/jhu/reader.action?docID=4392085.

Unsworth, J. (2012). What's Digital Humanities and How Did It Get Here? Blog Post. Retrieved from https://blogs.brandeis.edu/library/2012/10/09/whats-digital-humanities-and-how-did-it-get-here/.

Walters, T., & Skinner, K. (2011). New Roles for New Times: Digital Curation for Preservation. Retrieved from https://files.eric.ed.gov/fulltext/ED527702.pdf.

Webb, K.K. (2018). Development of Creative Spaces in Academic Libraries: A Decision Maker's Guide. Retrieved from https://ebookcentral.proquest.com/lib/jhu/reader.action?docID=5313191.

Zorich, D. (2008a). A Survey of Digital Humanities Centers in the United States. Retrieved from https://clir.wordpress.clir.org/wp-content/uploads/sites/6/pub143.pdf.

Zorich, D. (2008b). Digital Humanities Centers: Loci for Digital Scholarship. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=8895668A49AEB5CCF094C66F7E23029D?doi=10.1.1.187.5114&rep=rep1&type=pdf.

Appendix A: List of DH Milestones

In order to supplement background and historical information on the evolution of digital humanities for this paper, John Unsworth's list of milestones was utilized. This list, "organized chronologically and labeled according to where the leading-edge challenges were being addressed over time," identifies at least four distinct lines of descent, with different periods of ascendancy (Unsworth, 2012):

1. Computer Centers, late 1940s through the present (Tuebingen, Oxford, NCSA)
2. Scholarly Societies and Journals, mid-1960s through the present (ACH, ALLC)
3. Standards efforts, late 1980s to present (TEI)
4. Library Digitization & Digital Humanities Centers, 1990s to present (esp. research libraries)

These periods are broken down into greater detail below. I found Unsworth's timeline to be incredibly helpful in visualizing the evolution of the field of digital humanities, and its related projects and Centers.

1949-1970: DH in Computing Centers:

- 1949: Father Roberto Busa began his index of every word in the works of St. Thomas Aquinas (11M words); visits Thomas Watson and enlists IBM
- 1963: Roy Wisbey founded the Centre for Literary and Linguistic Computing in Cambridge to support his work with Early Middle High German Texts.
- 1966: Computers and the Humanities founded; Wilhelm Ott (developer of TUSTEP) learns to program (http://www.allc.org/node/210); see also his early experiments in "multimedia": http://people.lis.illinois.edu/~unsworth/Ott.multimedia.mov
- 1970: The first instance of what later became the Association for Literary and Linguistic Computing conference is held at the University of Cambridge.

1973-1992: DH and Scholarly Societies:

- 1973: Founding of The Association for Literary and Linguistic Computing
- 1978: Founding of the Association for Computers and The Humanities
- 1985: Perseus Project begun at Harvard
- 1986: Literary and Linguistic Computing founded

- 1986: SGML specification released
- 1987: Text-Encoding Initiative, Humanist begun
- 1989: First joint ACH/ALLC conference held in Toronto (at which Bob Kraft demonstrates Ibycus, TLG, hypertext)
- 1991: Electronic Beowulf Project
- 1992: H-Net founded

1992-2004: DH and Libraries:

- 1992: Etext Center founded at Virginia by Kendon Stubbs http://www.lib.virginia.edu/kls/text_only.html
- 1993: Mosaic released, IATH founded at Virginia, STG founded at Brown; EAD development begins at Berkeley.
- 1994: First edition of the TEI guidelines; Center for History and New Media founded
- 1996: First draft of XML spec released (co-edited by the North American editor of the TEI Guidelines); Digital Library Program founded at the University of Michigan; SCETI founded at Penn
- 1999: MITH founded
- 2003: HASTAC founded
- 2004: Blackwell Companion to Digital Humanities

2005-2012: DH mainstreamed:

- 2005: The Blake Archive approved by MLA's CSE
- 2006: MLA publishes Electronic Textual Editing
- 2006: ACLS report on Cyberinfrastructure for Humanities and Social Sciences
- 2006: NEH Office of Digital Humanities
- 2007: NEH DH Start-up grants
- 2007: Centernet founded
- 2008: CLIR Survey of Digital Humanities Centers
- 2012: CLIR "One Culture: Computationally Intensive Research in the Humanities and Social Sciences"

Appendix B: DH Organizations

In examining the history and background of the evolution of digital humanities and its related centers and activities, the study of organizations dedicated to such activities is useful. To show this, I created the table below to highlight: organization name, founding year, and any names they previously used. This table serves as evidence of trends within the digital humanities, such as the earliest organizations being focused around computing or the use of computers for humanities studies.

Organization Name	**Founding Year**	**Previously Known As**
European Association for Digital Humanities (EADH)	1973	Association for Literary and Linguistic Computing
Association for Computers and the Humanities (ACH)	1978	
Canadian Society for Digital Humanities (CSDH)	1986	Consortium for Computers in the Humanities
Consortium of Humanities Centers and Institutes (CHCI)	1988	
Alliance of Digital Humanities Organizations (ADHO)	2005	

centerNet	2007	
Australasian Association for Digital Humanities (aaDH)	2011	
Japanese Association for Digital Humanities (JADH)	2011/2012	
Humanistica	2014	

Appendix C: Analysis of Mission Statements

In order to establish a list of DH Centers' mission statements to analyze for a baseline understanding, I utilized a unique method, which is described here:

- Using centerNet's online list of affiliated Centers and Google search, I chose 25 DH Centers from across the United States.
- With these Centers chosen, I compiled a list (below) of relevant information for each, including name, location, and establishing date; in addition to linking the website with mission statement or related information present to each.
- Next, I grabbed all of the relevant information from these DH Centers' mission statements and copied them into a separate document (i.e. "democratize history," "mentor graduate students," "develop tools")
- Used the "Find" tool within Word to locate "buzz words" to establish similarity/relevance of mission focuses (i.e. "research = 26 hits," "collaborations/collaborator = 10 hits," "innovative = 10 hits")
- Looked at information on which constituents DH Centers state they mean to serve within their mission statements (i.e. "their own University," "DH scholars," "students")
- Began summarizing, from the above information, the broader categories that emerged (i.e. "sharing and exchanging of knowledge," "training/mentoring new generation of DH scholars," "provide space/resources/infrastructure to defined community")
- Pondered, from these chosen DH Centers, what possibly affected their mission statements (i.e. "funding sources," "physical locations," "research domains")

List of DH Centers for Mission Statement Analysis

Baker-Nord Center for the Humanities

Cleveland, Ohio

Established: 1996

Center for Humanities and Digital Research

Orlando, Florida

Established: 2007

Center for Public History + Digital Humanities

Cleveland, Ohio

Established: 2008

Center for Digital Humanities

Princeton, New Jersey

Established: 2014

Center for Digital Research in the Humanities

Lincoln, Nebraska

Established: 2005

Roy Rosenzweig Center for History and New Media

Fairfax, Virginia

Established: 1994

Center of Digital Humanities Research

College Station, Texas

Established: 2018

Cogut Center for the Humanities

Providence, Rhode Island

Established: 2003

CSUN Center for Digital Humanities

Northridge, California

Established: 2017

CUNY Graduate Center Digital Initiatives

New York, New York

Established: 2018

Digital Scholarship Lab

Richmond, Virginia

Established: Unknown

Humanities Technology (HumTech)

Los Angeles, California

Established: 2018 (name change)

Institute for Computing in Humanities, Arts and Social Science (I-CHASS)

Urbana, Illinois

Established: Unknown

Institute for Digital Research in the Humanities

Lawrence, Kansas

Established: 2010

Loyola Center for Textual Studies and Digital Humanities

Chicago, Illinois

Established: 2008

MATRIX Center for Digital Humanities and Social Sciences

East Lansing, Michigan

Established: 1996

Maryland Institute for Technology in the Humanities (MITH)

College Park, Maryland

Established: 1999

Perseus Digital Library

Medford, Massachusetts

Established: 1985

Collaboratory for Research in Computing for Humanities

Lexington, Kentucky

Established: Unknown

Scholar's Lab

Charlottesville, Virginia

Established: 2016

Stanford Humanities Center

Stanford, California

Established: 1980s

University of California Humanities Research Institute

Irvine, California

Established: 1987

Yale University Digital Humanities Lab

New Haven, Connecticut

Established: 2015

The Digital Humanities Initiative (DHi) at Hamilton College

Clinton, New York

Inception: 2009

Vanderbilt University Center for Digital Humanities

Nashville, Tennessee

Established: 2016

Appendix D: Interview Notes

Within this section are brief notes from all interviews held with DH Centers for this research. These interviews were open-ended, non-structured phone interviews with selected experts in the field. Given the length of the various discussions, responses have been shortened into bullet points. Full transcripts are not provided. What has been included is information that was deemed important for contextual and research purposes.

Interview #1: Kristen Mapes, Assistant Director of Digital Humanities at Michigan State University (DH@MSU)

Wednesday, October 30, 2019 5:00 pm

Please introduce yourself by stating your role and primary responsibilities.

- Assistant Director of Digital Humanities at Michigan State University
- Get people engaged in digital humanities
- Works with Digital Scholarship Lab (in library)
- Variety of duties
- Help manage curriculum for Undergraduate minor and Graduate certificate
- Also works as an Instructor
- Global Digital Humanities Symposium (annual)
- Works with various committees
- Consults with faculty and students for projects

Can you provide some brief background on Digital Humanities at MSU?

- Umbrella in which digital humanities happens
- Many groups and people doing work on-campus
- More of a research faculty

Founding date?

- DH website created in 2014/2015
- Bylaws passed a year and a half ago
- First Director of DH@MSU in 2012
- There are founding dates for specific units at the University, but not a set date for DH@MSU
- Keeps growing

Physical spaces?

- Matrix - The Center for Digital Humanities and Social Sciences
- Digital Scholarship Lab – MSU Libraries
- Many spaces/groups throughout campus

Consider yourself a DH Center? Why or why not?

- Could be considered a Center, but they do not have one central space like others do
- More like a "Community Group" on-campus
- Distributes financial support across units
- They bring together different "silos"

Does DH@MSU have a formal mission statement? If so, what is it?

- Bylaws are perhaps most formal mission statement online now; or their other website information
- Currently working on other similar documents

Do you know when Bylaws were developed?

- Last year, when they had an Advisory Board to start this type codifying

Have the Bylaws ever been re-visited?

- As a collective unit, DH@MSU has been around for a while, but now they are crafting something from actual experience

Do you feel your Bylaws (mission statement) document is similar to other DH Centers? Should it be?

- For other activities, they "benchmark" and see how others are doing things as models; but for mission statements, they haven't done much comparison
- Mission statements are so driven by an entity's own institutional goals
- Report coming out in a few months on Digital Strategy
- DH@MSU structured differently because they're not within a Department; they're not driven by one focus

What is DH@MSU doing to meet its outlined mission(s)? (i.e. What activities does your Center engage in to fulfill your stated mission?)

- Global Symposium (annual)
- Cultural Heritage

- Pedagogy

Does your Center produce a lot of research data?

- Yes; varies by unit
- Some units have more in-place for strategies
- Work closely with libraries; helpful

What does your Center do to ensure the long-term preservation of your research data?

- Will be setting up ways to preserve data better; conversations with Data Librarian
- Don't have a policy across the board

Do you feel that the preservation of research data is important to DH Centers' missions? Why or why not?

- Yes
- With a Librarian background, thinks it's a strong value in MSU's DH community because of their scholarship and research
- Need to think of a long-term plan for whatever you're researching/planning
- Supply Quarter Sheet handout to students and staff for consultation
- Digital Preservation tip sheet – what are plans for research data?

Interview #2: Mills Kelly, Executive Director of Roy Rosenzweig Center for History and New Media at George Mason University (RRCHNM)

Thursday, October 31, 2019 11:30 am

Please introduce yourself by stating your role and primary responsibilities.

- Executive Director of Roy Rosenzweig Center for History and New Media at George Mason University
- Research Center within College
- Budgetary, financial, and strategic leadership

Can you provide some brief background on the Roy Rosenzweig Center for History and New Media?

- First DH Centers

- Celebrated 25th anniversary last month

Founding date?

- 1994
- Who Built America? CD-ROMs, meant to democratize history, were first DH project in history

Physical spaces?

- Structurally, they are in Research Center inside of a Department
- Smaller than they were previously
- In separate research building across from History Department

Consider yourself a DH Center? Why or why not?

- Yes, although all work focuses on history specifically

Does DH@MSU have a formal mission statement? If so, what is it?

- "We use digital media and computer technology to democratize history; to incorporate multiple voices, reach diverse audiences, and encourage popular participation in presenting and preserving the past."

Do you know when this mission statement was developed?

- Originally in 1994

Has it ever been re-visited?

- Tweaked in 2005

Do you feel your mission statement is similar to other DH Centers? Should it be?

- Biggest differences: (1) retained focus on democratizing history all along (2) many DH Centers are located within Libraries, but our location is different

What is RRCHNM doing to meet its outlined mission(s)? (i.e. What activities does your Center engage in to fulfill your stated mission?)

- Work in 3 main areas: (1) software development (2) public humanities projects (3) education projects (for teachers and students)
- All developments are free to users; always

Does your Center produce a lot of research data?

- Not too much
- Probably right in the middle
- Some projects create more data than others

What does your Center do to ensure the long-term preservation of your research data?

- Sustainability is the number one issue for DH Centers
- Dealing with issues right now
- When DH projects were kicked off their sites by local servers, Roy Rosenzweig offered to store them
- Forcing them to "clean house"
- Flattening out three dozen sites
- Moving them to Library Digital Archives
- Infrastructure from Libraries is useful

Do you feel that the preservation of research data is important to DH Centers' missions? Why or why not?

- As a Historian, feels that everything should be saved
- Very essential
- Federal funding agencies now requiring data management plans, but not providing financial assistance to do so
- Funding projects that could be lost forever, but what can be done to help?
- Nobody that he's aware of is providing funding for sustainability specifically
- Small endowment for RRCHNM helps them

Interview #3: Janet Thomas Oppedisano, Director of LITS Academic Digital Initiatives, and previous Co-Director of Digital Humanities Initiative; Lisa McFall, Associate Director of Metadata and Digital Initiatives; and Shay Foley, Director of Metadata and Digital Strategies; at Digital Humanities Initiative (DHi)

Thursday, October 31, 2019 2:00 pm

Please introduce yourself by stating your role and primary responsibilities.

- Janet: previously Co-Director of DHi, and still works with digital scholarship and digital humanities
- Lisa: Associate Director of Metadata and Digital Initiatives. Works with digital scholarship
- Shay Foley: Director of Metadata and Digital Strategies; technical services
- All collaborate together

Can you provide some brief background on the DHi?

- Janet used to be Co-Director of DHi; now she is Director of LITS Academic Digital Initiatives

Founding date?

- In 2009, small grant was given to develop initiative; spent one year researching

Physical spaces?

- Currently a big aspect for them
- They previously didn't think they needed a physical space, but are sort of pressured to have one
- Without a physical space within an academic center, you "don't exist"
- Physical space being revised now

Consider yourself a DH Center? Why or why not?

- Never refer to themselves as a "Center;" call themselves an "Initiative"
- Could be argued they are a Center
- See themselves as "collaborative space" more

Does DHi have a formal mission statement? If so, what is it?

- "DHi is an interdisciplinary collaboratory supporting long-term faculty-led research projects. DHi is a co-curricular center at the College whose goals include: developing scholar's understanding of digital research methods and tools, integrating student collaborators into faculty research projects, connecting scholars with related research interests nationally and internationally, promoting "big ideas" in digital humanities investigations, assisting faculty in securing funds for and managing research projects, and facilitating translations of research into curricula."

Do you know when this mission statement was developed?

- Evolved over time
- Before, it focused more on faculty research and development

Has it ever been re-visited?

- Two years ago, it was changed to show collaborative research as main goal

Do you feel your mission statement is similar to other DH Centers? Should it be?

- They've cross-checked a bit
- Depends on whether DH Center is merged with Library or IT Department
- Collaboration with Graduate program

What is DHi doing to meet its outlined mission(s)? (i.e. What activities does your Center engage in to fulfill your stated mission?)

- Work with faculty and students on specific research; supply advice, training, and structure
- Give online public presence
- Lisa's role focuses on archive, organizational methods, how people would get to their materials, how to present material to be discovered, role of metadata

- American Prison Writing program; demographic information caused them to choose an extension for discovery

Does your Center produce a lot of research data?

- Difference between types of data
- Data to build archive-based projects generates tons of data
- Is it research-based data because it's in archives?
- Data of other projects (not archive-based) that led to documentary films, maps, etc.

What does your Center do to ensure the long-term preservation of your research data?

- Difficult
- High-maintenance and expensive

Do you feel that the preservation of research data is important to DH Centers' missions? Why or why not?

- Yes, but have never been successful
- Can't lose years of history